WASHINGTON STATE DEPARTMENT OF ECOLOGY

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND RECLAIMED WATER DISCHARGE PERMIT NO. WA0021105

State of Washington
DEPARTMENT OF ECOLOGY, SOUTHWEST REGIONAL OFFICE
Olympia, Washington 98504-7600

In compliance with the provisions of
State of Washington Water Pollution Control Law, Chapter 90.48 Revised Code of Washington
State of Washington Reclaimed Water Act, Chapter 90.46 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

City of Chehalis, Post Office Box 871
Chehalis, Washington 98532
Contributing Jurisdictions

City of Napavine
Post Office Box 556
Napavine, Washington 98565

Lewis County Sewer District No. 1
Post Office Box 1122
Chehalis, Washington 98532

Plant Location: 1191 NW Shoreline Drive, Chehalis, Washington NEW: 420 NW Louisiana Ave., Chehalis 98532	Receiving Water: Chehalis River, River Mile 74.3 1026 State Route 6 (Reuse Application Site)
Water Body I.D. No.: WA-23-1020	Discharge Location: Latitude: 46° 39' 38" N Longitude: 122° 59' 03" W
Plant Type: (Current) Trickling filter, seasonally an activated sludge tank provides nitrification	New POTW: Sequencing Batch Reactor with coagulation, sand filtration, & reuse as authorized under the terms of this permit.

is authorized to discharge in accordance with the special and general conditions that follow.

Kelly Susewind, P.E., P.G.
Southwest Regional Manager
Water Quality Program
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3. & R3.	Discharge Monitoring Report	Monthly	March 15, 2005
S3.E & S5.F	Noncompliance Notification	As necessary	
S4.A.	Declaration of Construction	Once	Upon completion and prior to utilizing new facilities.
S4.C.	Plans for Maintaining Adequate Capacity	As necessary	
S4.E.	Notification of New or Altered Sources	As necessary	
S4.F.	Infiltration and Inflow Evaluation	Annually	July 15, 2005
S4.G.	Waste load Assessment	Annually	July 15, 2005
S5.G.	Operations and Maintenance Manual	Once	Prior to Declaration of Construction (of S4.A)
S5.G.	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	July 31, 2006
S6.D.	Industrial User Survey	1/permit cycle	August 1, 2005
S6.D.	Industrial User Survey Update	Annually	August 1, 2006
S8.	Construction Quality Assurance Plan	Once	Prior to starting construction
S9.	Compliance Schedule Milestone Report	Annually	August 1, 2005
S10.	Spill Plan	1/permit cycle	September 1, 2007
S10.	Spill Plan Update	As necessary per annual review	
S11.A.	Mixing Zone Study	As necessary	Within 1 year of outfall modification
S12.A.	Acute Toxicity Characterization Data	Quarterly for four quarters if discharging.	Within 210 days after Submitting Declaration of Construction (S4.A)
S12.A.	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S12.C.	Acute Toxicity Compliance Monitoring Reports	Quarterly	90 days following the last quarterly report in S12.A. if subject to limits per S12.B.

Permit Section	Submittal	Frequency	First Submittal Date
S12.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S12.D	Acute Toxicity TI/TRE Plan	As necessary	March 1, 2009
S12.E	Acute Toxicity Effluent Characterization with Permit Renewal Application	2/permit cycle	
S13.A	Chronic Toxicity Characterization Data	Quarterly for four quarters if discharging.	Within 210 days after submitting Declaration of Construction (S4.A)
S13.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S13.C	Chronic Toxicity Compliance Monitoring Reports	Quarterly	90 days following the last quarterly report in S13.A. if subject to limits per S13.B.
S13.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S13.D	Chronic Toxicity TI/TRE Plan	As necessary	March 1, 2009
S13.E	Chronic Toxicity Effluent Characterization with Permit Renewal Application	2/permit cycle	
S14.	Outfall Evaluation	Every 2 years	March 1, 2009
R3.A.4	Cross Connection Control Report	Annually	July 15, 2008
R4.F.1	Annual Percolation Rate Analysis	Annually	July 15, 2008
G1.	Notice of Change in Authorization	As necessary	
G4.	Reporting Planned Changes	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	January 1, 2009
G21	Reporting Anticipated Non-compliance	As necessary	
G22	Reporting Other Information	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Effluent Limitations - General

In addition to the terms and conditions in this permit, the operation of the Wastewater Treatment Plant is subject to the provisions of the Consent Decree, entered on January 14, 2000, in the matter of *Centralia, et al. v. EPA, et al.*, Civil Action No. 96-5968RJB, United States District Court for the Western District of Washington at Tacoma. All references to a "Consent Decree" within this permit shall be in reference this document.

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge municipal wastewater at the permitted location into the Chehalis River subject to the following limitations. (Beneficial use of reuse water shall be subject to pollutant limitations and requirements of sections R1 through R5).

B. Interim Effluent Limitations

Interim limits shall apply until the first day of the month following the Department's receipt of the Declaration of Construction of Water Pollution Control Facilities as required by section 173-240-095 Washington Administrative Code (WAC) upon completion of construction of the approved wastewater treatment facility.

INTERIM EFFLUENT LIMITATIONS[a] (May - October) (Summer)		
Parameters	**Monthly Average**	**Weekly Average**
BOD_5[b]	20 mg/l, 334 lbs/day 85 percent removal	30 mg/l, 500 lbs/day
TSS[c]	25 mg/l, 417 lbs/day 85 percent removal	37.5 mg/l, 626 lbs/day
Fecal Coliform Bacteria	200/100 mL	400/100 mL
PH	shall not be outside the range of 6.0 to 9.0	
Parameters	**Monthly Average**	**Daily Maximum**
Total Chlorine Residual	0.021 mg/L	0.023 mg/L
Ammonia (NH_3-N)	18.6 mg/L, Minimize by using polishing ponds.	36.8 mg/L

INTERIM EFFLUENT LIMITATIONS[a] (November - April) (Winter)		
Parameters	**Monthly Average**	**Weekly Average**
BOD_5[d]	30 mg/l, 1,000 lbs/day 75 percent removal	45 mg/l, 1,500 lbs/day
TSS[e]	30 mg/l, 1,000 lbs/day 65 percent removal	45 mg/l, 1,500 lbs/day
Fecal Coliform Bacteria	200/100 mL	400/100 mL
PH	shall not be outside the range 6.0 to 9.0	
Parameters	**Monthly Average**	**Daily Maximum**
Total Chlorine Residual	0.023 mg/L	0.026 mg/L
Ammonia (NH_3-N)	12.9 mg/L	31.6 mg/L

INTERIM EFFLUENT LIMITATIONS[a] (Year Round)		
Parameter	Monthly Average	Daily Maximum
Silver[(3,4,5)]	7.7 µg/L[(1)]	12.4µg/L[(1)]
Zinc[(3,4,5)]	158. µg/L[(2)]	281. µg/L[(2)]

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] The average monthly effluent concentration for BOD_5 shall not exceed 20 mg/L or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

[c] The average monthly effluent concentration for Total Suspended Solids shall not exceed 25 mg/L or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

[d] The average monthly effluent concentration for BOD_5 shall not exceed 30 mg/L or 25 percent of the respective monthly average influent concentrations, whichever is more stringent.

[e] The average monthly effluent concentration for TSS shall not exceed 30 mg/L or 35 percent of the respective monthly average influent concentrations, whichever is more stringent.

Metals Analysis Footnotes:

[(1)]The Method Detection Level (MDL) for silver is 1 µg/L using graphite furnace atomic absorption spectrometry and method number 220.2 from 40 Code of Federal Regulations (CFR) Part 136. The quantitation level (QL) for silver is 5 µg/L (5 x MDL). This or an EPA method yielding a lower QL such as those methods specified in EPA sample method 1669 as appropriate for sampling at the level of the Water Quality criterion may be used to fulfill this monitoring requirement.

[(2)]The MDL for zinc is 2 µg/L using inductively coupled plasma as specified in EPA method 200.7 as listed in 40 CFR Part 136. The quantitation level (QL) for zinc is 10 µg/L (5 x MDL) using this method. This or an EPA method yielding a lower QL such as those methods specified in EPA

sample method 1669 as appropriate for sampling at the level of the Water Quality criterion may be used to fulfill this monitoring requirement.

[3]The above Quantitation Levels shall be obtained for assessment of compliance with the above effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department. The matrix specific MDL and QL shall be calculated as follows:

MDL = 3.14 x (standard deviation of 7 replicate spiked samples). This corresponds to the calculation of the method detection limit, as defined in 40 CFR Part 136, Appendix B, with the provision that the MDL be calculated for a specific effluent matrix.

The QL = 5 x MDL

[4]If the measured effluent concentration is below the QL as determined in Footnotes #1 and #2 above, the Permittee shall report NQ for non-quantifiable.

[5]Average values shall be calculated as follows: measurements below the MDL = 0; measurements greater than the MDL = the measurement.

C. Final Effluent Limitations During Wet Weather

Beginning on the first day of the month following the Department's receipt of the "Declaration of Construction of Water Pollution Control Facilities" for the new wastewater treatment, reclamation, and reuse facility, and lasting through the expiration date of this permit, the Permittee will be authorized to discharge municipal wastewater to the Centralia Reach of the Chehalis River, subject to the following conditions and limitations:

1. The Permittee shall track, on a daily basis, the flow in the Centralia Reach of the Chehalis River according to the USGS Ground Mound gage (12-027500) using the equation y = 0.7396*x - 28.28 ("y" is the calculated flow (cfs) in the Centralia Reach, "x" is the recorded flow (cfs) as measured at the Ground Mound gage).

2. The Permittee shall be authorized to commence discharge to the Chehalis River at any time on the day after the seven-day moving average of daily flows in the Centralia Reach of the Chehalis River is greater than 1,000 cfs and the daily flow of the Centralia Reach has been greater than 2,500 cfs during at least one of the preceding seven days. Periods when these criteria are met shall be referred to as "wet weather" periods.

3. The Permittee shall not continue discharge to the Chehalis River for more than one day after the seven-day moving average flow goes below 1,000 cfs. Discharges to the Chehalis River shall not re-commence until the criteria of S1.C.2 (above) is again met. Periods when discharge is not authorized under this permit shall be referred to as "dry weather" periods.

4. The following limits shall be met when discharging to the Chehalis River.

FINAL EFFLUENT LIMITATIONS FOR RIVER DISCHARGES in "WET WEATHER"			
Parameters	Monthly Average[a]	Weekly Average[a]	Maximum Day[d]
BOD_5	30 mg/L, 823.5 lb/day 85 percent removal [b, c]	45 mg/L, 1,235 lbs/day	2,330 lb/day
TSS	30 mg/L, 1,002 lb/day 85 percent removal [b, c]	45 mg/L, 1,503 lbs/day	2,330 lb/day
Effluent Flow	6.0 MGD		13.0 MGD
Ammonia (Total)	11.3 mg/L 565 lb/day		15 mg/L 644 lb/day
Fecal Coliform Bacteria	200/100 mL	400/100 mL	
Chlorine (Total Residual)	0.023 mg/L [e]		0.026 mg/L [e]
pH	shall not be outside the range 6.0 to 9.0		

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] The average monthly effluent concentration for BOD_5 and Total Suspended Solids shall not exceed 30 mg/L or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

[c] In accordance with WAC 173-221-050, the Permittee is authorized to submit supporting documentation for alternative final effluent limitations.

[d] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

[e] This effluent limit applies whenever chlorine is used in the facility at a point where it may be discharged. If chlorine is not applied to clarified effluent during the monitoring period enter "no potential discharge of chlorine" on the DMR for the period.

D. Mixing Zone Descriptions

Mixing zones are described for the "wet weather" and "dry weather" situations, based on the Chehalis River flows as defined in section S1 of this permit. For the "dry weather" condition, no discharge shall be authorized to the Chehalis River after submittal of the Declaration of Completion of Construction of Water Pollution Control Facilities for the wastewater reclamation facility described in "Contract Documents for Chehalis Regional Water Reclamation Facility," February, 2004 as amended. Until then, discharge in both "wet weather" and "dry weather" conditions shall be allowed a mixing zone.

The maximum size of a mixing zone shall comply with the following:

The Chronic mixing zone shall comply with the most restrictive combination of the following:

(i) Not extend in a downstream direction for a distance from the discharge port(s) greater than three hundred feet plus the depth of water over the discharge port(s), or extend upstream for a distance of over 100 feet;

(ii) Not utilize greater than twenty-five percent of the flow; and

(iii) Not occupy greater than 25 percent of the width of the water body.

The zone of acute criteria exceedance shall comply with the most restrictive combination of the following:

(i) Not extend beyond ten percent of the distance towards the upstream and downstream boundaries of an authorized mixing zone, as measured independently from the discharge port(s);

(ii) Not utilize greater than two and one-half percent of the flow; and

(iii) Not occupy greater than 25 percent of the width of the water body.

Mixing Zone Ratios applicable for the term of this permit were calculated to be as follows. "Summer" and "Winter" mixing zones are seasonally based and apply to interim permit limits. "Dry Weather" and "Wet Weather" mixing zone ratios are based on Chehalis river flow, and are applicable to final limits:

CONDITION (as defined in S1):	Acute MZR	Chronic MZR
Summer (May 1 – October 31)	1.2:1	4.9:1
Winter (November 1 – April 30)	1.3:1	7.3:1
Dry Weather (per S1.C.3)	No mixing zone	No mixing zone
Wet Weather (Per S1.C.2)	4.1:1	42.5:1

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

The Permittee shall monitor in accordance with the following schedule:

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Influent[6]	BOD_5	mg/L, lbs/day	Influent	3/week	24-hour composite[7]
Influent[6]	TSS	mg/L, lbs/day	Influent	3/week	24-hour composite[7]
Influent[6]	Ammonia	mg/L, lbs/day	Influent	3/week	24-hour composite[7]
Influent[6]	pH	Std. Units	Influent	Daily	Grab[9]
Effluent	Flow rate	MGD	Final Effluent[11]	Continuous[1]	Meter
Effluent	BOD_5	mg/L, lbs/day, & % removal[8]	Final Effluent[11,10]	3/week	24-hour composite[7]
Effluent	TSS	mg/L, lbs/day, & % removal[8]	Final Effluent[11,10]	3/week	24-hour composite[7]
Effluent	Ammonia	mg/L, lbs/day	Final Effluent[11,10]	3/week	24-hour composite[7]
Effluent	pH	Std. Units	Final Effluent[11]	Daily	Grab[9]
Effluent	Temperature	°C	Final Effluent[11]	Daily	Grab[9]
Effluent	Total Residual Chlorine	mg/L	Final Effluent[11]	Daily Interim[2]	Grab[9]
Effluent	Fecal Coliform	CFU/100 ml	Final Effluent[11]	5/week	Grab[9]
Effluent	Pollutants listed in EPA form 3510-2A parts B.6 & D for NPDES permit re-application [12]	ug/L	Final effluent[11]	Annually Final[3]	Grab[9]
Effluent	Metals (listed at note [4]),	ug/L	Final effluent[11]	Quarterly[5]	Composite

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Sludge	Metals (Listed at note [4]),	mg/Kg of dry wt.	lime stabilized	Quarterly Final[3]	Grab[9]

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Sludge[2]	Metals (Listed at note [4]),	mg/Kg of dry wt.	Sludge drying beds	Annually	Grab[9] Composite
Sludge	"Priority Pollutants" per NPDES permit application Form 2A, part D.	ug/L	Lime stabilized	Annually Final[3]	Grab[9]
Final[3] Receiving Water Monitoring					
Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Receiving Water	Flow	CFS in Centralia Reach	Per S1.C.1	Daily Final[3]	USGS provisional data
Receiving Water	Temperature	Degrees C	50 to 200 feet upstream of the outfall	Daily when discharging	Grab[9]
Receiving Water	arsenic, cadmium, copper, lead, mercury, selenium, & zinc	ug/L of Total & Dissolved	50 to 200 feet upstream of the outfall	Two days annually within 7 days of the first fall river discharge.	EPA clean sampling method 1669
Receiving Water	TSS, Dissolved organic carbon, Hardness, Ca, & Mg	mg/L	50 to 200 feet upstream of the outfall	Two days annually within 7 days of the first fall river discharge.	Grab[9]
Receiving Water	Fecal coliform	CFU/100 mL	50 to 200 feet upstream of the outfall	Two days annually within 7 days of the first fall river discharge.	Grab[9]
Receiving Water	pH	standard units	50 to 200 feet upstream of the outfall	Two days annually within 7 days of the first fall river discharge	Grab[9]

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Toxicity	Initial Acute Toxicity and Chronic Toxicity Testing	See S.12 (acute) and S.13 (chronic)	Final Effluent	Quarterly for one year when new POTW is discharging to Chehalis River	Survival
Toxicity	Periodic Acute and Chronic Toxicity Testing	See S.12 (acute) and S.13 (chronic)	Final Effluent	Once in last winter of permit	Survival

[1] Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken every eight hours when continuous monitoring is not possible.

[2] Sampling frequencies noted as "interim" shall be required only until the date of the City's Declaration of Construction of Water Pollution Control Facilities for the new facility.

[3] Sampling frequencies noted as "final" shall commence on the date of the Declaration of Construction of Water Pollution Control Facilities for the new facility. (Where a sampling frequency does not note either "interim" or "final" it is required under both conditions.)

[4] Metals shall include antimony, arsenic, cadmium, copper, chromium, silver, lead, mercury, molybdenum, nickel, selenium, thallium, and zinc

[5] Where metals for which quarterly monitoring is required also fulfill requirements for the annual analysis of the larger list of pollutants, the quarterly monitoring results may be used to fulfill both requirements.

[6] "Influent" means the raw sewage flow and shall be sampled at the headworks of the treatment plant excluding any sidestream returns from inside the plant. If necessary to avoid fouling, influent samplers may be located after flows are screened and degritted. This is acceptable so long as no return flows enter the wastestream upstream of the sampling location.

[7] 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

[8] Percent (%) removal of BOD and TSS shall be calculated with the following algorithm (concentrations in mg/L): (Average Monthly Influent Concentration - Average Monthly Effluent Concentration) /Average Monthly Influent Concentration (calculation of percent removal is not required for ammonia).

[9] "Grab" means an individual sample collected over a 15 minute, or less, period.

[10] Effluent samples for BOD_5 analysis may be taken before or after the disinfection process. If taken after, the sample shall be dechlorinated and reseeded if chlorine is used.

[11] "Final Effluent" means wastewater which has exited the last treatment process or operation. Typically, this is after or at the exit from the chlorine contact chamber or UV disinfection process.

[12] Pollutants for which additional effluent monitoring data is required for re-application for this permit include the 99 Pollutants listed in Form 3510-2A part D, and those pollutants in part B.6 for which sampling is not already required by this permit, namely: Total Residual Chlorine, Dissolved Oxygen, Total Kjeldahl Nitrogen, Nitrate + Nitrite, Oil and Grease, Phosphorus, and Total Dissolved Solids.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including

representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Instrument Calibration

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. Calibration records shall be maintained for at least three years.

The Permittee shall also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every two weeks when Class A reuse water is being produced.

E. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

S3. REPORTING AND RECORDKEEKPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within 60 days after the sample date. The report(s) shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging to surface waters or to reuse applications. The discharge location shall be noted in the monitoring results along with the respective flow to each discharge location utilized during a given day. Similarly the monitoring report shall note whether the application was at agronomic rates, and the quality of the reuse water (A or C) when not discharging to the river.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within 30 days after becoming aware of the violation.

2. Immediately notify the Department of the failure to comply.

3. Submit a detailed written report to the Department within 30 days (five days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Automatic Resampling

Where sample results do not meet sample handling requirements, laboratory quality control objectives, or sample results exceed any daily or instantaneous limit of this permit, the Permittee shall collect and analyze another sample as early as possible. Such re-sampling shall not be required if the Permittee has already collected another sample for analysis. If a resample indicates a continuing violation of any limitation of this permit, the Permittee shall continue sampling no less frequently than monthly until compliance is restored as evidenced by the results of monitoring.

G Maintaining a Copy of This Permit

A copy of this permit must be kept at the treatment plant and be made available upon request to the public or the Department inspectors.

S4. FACILITY LOADING

A. Declaration of Completion of Construction

The Permittee shall provide a Declaration of Construction of Water Pollution Control Facilities to the Department prior to utilizing the new Wastewater Reclamation facility or portions thereof as required under Chapter 173-240-095 WAC using the form stipulated by that regulation. This Declaration shall note the date on which flows will commence from the new facility and when flows will be curtailed from the existing facility.

B. Design Criteria

The Permittee shall not exceed the below flows and waste loadings for which the new Wastewater Reclamation facility was designed. (Flows and loadings for the existing POTW are not listed as the utility of doing so would be to determine when a new facility is necessary, and a new facility is already required by Consent Decree.)

Maximum running 30-day average flow capacity for reuse water:	3.5 MGD
Peak flow during dry weather (no discharge to Chehalis R):	6.2 MGD
Maximum average monthly flow:	6.0 MGD
Peak flow day:	13.0 MGD
Maximum monthly average BOD_5 loading capacity:	5,490 lb/day
Maximum monthly average TSS loading capacity:	6,680 lb/day
Maximum monthly ammonia (NH3 + NH4) loading capacity:	830 lb/day

C. Plans for Maintaining Adequate Capacity

1. The permittee shall submit to the Department a plan and a schedule for continuing to maintain capacity when

   a) any of the criteria in S4.A are exceeded,

   b) the actual flows or waste loads reaches 85 percent of any monthly average design criteria in S4.A for three consecutive months; or

   c) projected increases in flow or loadings would reach design capacity within five years, whichever occurs first.

2. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet the objective of maintaining capacity.

   a) Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.

b) Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.

c) Limitation on future sewer extensions or connections or additional waste loads.

d) Modification or expansion of facilities necessary to accommodate increased flow or waste load.

e) Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

D. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal which would violate any limit or requirement of this permit or that has a reasonable likelihood of adversely affecting human health or the environment

E. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the Publicly Owned Treatment Works (POTW) is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3*)* would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTWs ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

F. Infiltration and Inflow Evaluation

1. The Permittee shall conduct an infiltration and inflow evaluation. Refer to the U.S. EPA publication, *I/I Analysis and Project Certification*, available as Publication No. 97-03 at: Publications Office, Department of Ecology, P.O. Box 47600, Olympia, Washington 98504-7600. Plant monitoring records may be used to assess measurable infiltration and inflow.

2. A report shall be prepared which summarizes any measurable infiltration and inflow. If infiltration and inflow have increased by more than 15 percent from that found in the first report based on equivalent rainfall, the report shall contain a plan and a schedule for: (1) locating the sources of infiltration and inflow; and (2) correcting the problem.

3. The report shall be submitted by **July 15, 2005**, and annually thereafter.

G. Wasteload Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by **July 15, 2005**, and annually thereafter for the period of June 1 of the prior year through May 30 of the same year. The report shall tabulate all noncompliance with the effluent limitations of this permit over the period and include an explanation of the cause and solution to such violations if possible. It shall also include a comparison between the existing and design values for the seven parameters tabulated in section S4.B. The report shall indicate the percentage increase in these parameters since the last annual report. The report shall also state the present and design population (or population equivalent), projected population growth rate, and the estimated date when the design capacity is projected to be reached by the most restrictive of the design parameters above.

R1. RECLAIMED WATER LIMITATIONS

A. Dry Weather Irrigation

During the term of this permit, the production and use of reclaimed water shall be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute Class A or C reclaimed water to public and private entities for commercial and industrial uses as befits the use. This authorization is not conditioned upon river flow. The Permittee may apply Class C reclaimed water to land for irrigation up to the agronomic rate at locations listed in Condition R4. The Permittee may apply reclaimed water that is treated to reduce nitrogen, oxidized, coagulated, filtered, and disinfected and meets Class A reclaimed water standards and groundwater recharge criteria to land for surface percolation at these same locations on days when application rates exceed crop agronomic uptake. The application to land of Class A reclaimed water shall be subject to rules developed for the protection of Groundwater quality and ensuring against degradation of drinking water. The Permittee shall report the quality of water provided and the use of that water (agronomic irrigation or surface percolation). Distribution and use of reclaimed water is subject to the following treatment and water quality limitations:

Class C Reclaimed Water Limits (Application to Crops at Agronomic Rates)		
Parameter	**Average Monthly[a]**	**Average Weekly [b]**
Flow	3.5 MGD	N/A
BOD_5[c]	30 mg/L	45 mg/L
TSS[c]	30 mg/L	45 mg/L
Dissolved Oxygen	Above 0.5 mg/l after secondary treatment processes at all times	
Chlorine Residual[f]	Above 0.5 mg/l at all times	

Class C Reclaimed Water Limits (Application to Crops at Agronomic Rates)		
Total Coliform	**7-day Median[d]** 23 MPN/ 100 ml	**Sample Maximum[e]** 240 MPN/100 ml
pH	Shall be between 6 and 9 standard units at all times	
[a] The average monthly effluent concentration is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If discharge of Class C reclaimed water occurs for only part of a month, data collected on those days shall be averaged to calculate compliance with Class C reclaimed water limits.		
[b] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. This definition is unaltered for discharges of less than a full week.		
[c] The sampling point for BOD and TSS will be the final effluent after disinfection.		
[d.] The median number of total coliform organisms in the reclaimed water after disinfection shall not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed.		
[e] The number of total coliform organisms shall not exceed 240 per 100 milliliters in any single sample.		
[f.] A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area, or conveyance to the storage pond if reclaimed water is not directly piped to the use area.		

Class A Reclaimed Water Limits (Applicable to surface percolation)		
Parameter	**Average Monthly[a]**	**Average Weekly [b]**
Flow	3.5 MGD	N/A
BOD_5[c]	30 mg/L	45 mg/L
TSS[c]	30 mg/L	45 mg/L
Dissolved Oxygen	Above 0.5 mg/l at all times	
Chlorine Residual[g]	Above 0.5 mg/l at all times	
Turbidity	**Average Monthly[a]** 2 NTU	**Sample Maximum[d]** 5 NTU
Total Nitrogen as N	10 mg/L	15 mg/L
Total Coliform	**7-day Median[e]** 2.2 MPN/ 100 ml	**Sample Maximum[f]** 23 MPN/100 ml
pH	Shall be between 6 and 9 standard units at all times	

Class A Reclaimed Water Limits (Applicable to surface percolation)
[a] The average monthly effluent concentration is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If discharge of Class A reclaimed water occurs for only part of a month, data collected on those days shall be averaged to calculate compliance with Class A reclaimed water standards.
[b] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. This definition is unaltered for discharges of less than a full week.
[c] The sampling point for BOD and TSS will be the final effluent after disinfection.
[d] The sample maximum is defined as the value not to be exceeded by any single sample.
[e] The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed.
[f] The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.
[g]A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area, or conveyance to the storage pond if reclaimed water is not directly piped to the use area.

The following Ground water enforcement limitations shall not be exceeded as demonstrated from results of sampling of monitoring wells MW-1E, MW-1SW, MW-5S, MW-5W, and MW-5NE.

GROUND WATER ENFORCEMENT LIMITATIONS:	
Primary Drinking Water Criteria	**Sample Maximum[a]**
Nitrate as N	10 mg/L
Nitrite as N	1 mg/L
Arsenic	50 µg/L
Cadmium	5 µg/L
Chromium	100 µg/L
Fluoride	2 mg/L
Mercury	2 µg/L
Nickel	100 µg/L
Total Trihalomethanes (TTHM)	0.10 mg/L
Other Groundwater Criteria	**Sample Maximum[a]**
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Sulfate	250 mg/L
Copper	1300 µg/L
Lead	15 µg/L
Manganese	50 µg/L
Silver	100 µg/L
Zinc	5000 µg/L

GROUND WATER ENFORCEMENT LIMITATIONS:
[a]The sample maximum is the highest allowable concentration for any sample as measured in the ground water at the top of the uppermost aquifer beneath or down gradient of the infiltration site.

R2. RECLAIMED WATER MONITORING REQUIREMENTS

A. Class A and C Reclaimed Water Monitoring

Beginning upon commencement of discharge of reclaimed water from the POTW to the reuse site, and lasting through the expiration date of this permit, the Permittee shall monitor reclaimed water, on days that it is being produced, at a point after the last process prior to delivery to the reuse site (except for dissolved oxygen as specified below). Monitoring shall be subject to the same sampling and analytical procedures, flow measurement, instrument calibration, and laboratory accreditation requirements as set forth in section S2. Monitoring shall be performed according to the following schedule. Where monitoring is required in S2, monitoring of reclaimed water as required below for the same parameters at the same location may be used to fulfill both requirements, and disinfected reclaimed water analyses may be reported in lieu of "secondary effluent":

Parameter	Units	Sample Point[a]	Sampling Frequency	Sample Type
Flow	MGD	Influent	Continuous	Recording meter
		Disinfected reclaimed water	Continuous	Recording meter
BOD_5	mg/L	Influent	3/week	24-hour composite
		Disinfected reclaimed water	3/week	24-hour composite
TSS	mg/L	Influent	3/week	24-hour composite
		Disinfected reclaimed water	3/week	24-hour composite
pH	Standard Units	Influent	Daily	Measurement
		Disinfected reclaimed water	Daily	Measurement
Dissolved Oxygen	mg/L	Wastewater prior to filtration	Daily	Grab[b]
Turbidity (only required for	NTU	Secondary effluent[a]	Daily when Class 'A' reclaimed water is produced	recording meter

Parameter	Units	Sample Point[a]	Sampling Frequency	Sample Type
class A reclaimed water)	NTU	Filter effluent[c] prior to disinfection	Continuous when producing Class 'A' reclaimed water	recording meter
Coagulant	gallons	Coagulant feed	Daily when used	Metered usage
Coagulant Aid	gallons	Coagulant feed	Daily when used	Metered usage
Total Nitrogen (as N)	mg/L	Disinfected reclaimed water	Weekly	24-hour composite
Ammonia (as N)	mg/L	Disinfected reclaimed water	Weekly	24-hour composite
Nitrate (as N)	mg/L	Disinfected reclaimed water	Weekly	24-hour composite
Total Coliform[d]	organisms in 100 ml	Disinfected reclaimed water	Daily	Grab[b]
Priority Polutants	ug/L	Disinfected reclaimed water	Once within first year of discharge	24-hour composite
Total Chlorine Residual	mg/L	Water Reuse Distribution Line	Daily (when in use)	Grab[b]
[a] Secondary effluent samples shall be collected downstream of Sequencing Batch Reactors, prior to filtration. Disinfected reclaimed water samples shall be collected from a designated moniotirng point at the treatment plant, downstream of UV disinfection.				
[b] Where Grab samples are called for, samples shall be collected at the time of day when the Permittee anticipates wastewater flows are likely to be highest.				
[c]Filter effluent turbidity analysis shall be performed by a continuous recording turbidimeter and shall also be recorded at least every four hours.				
[d]As an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per latest edition of standard methods.				

B. Ground Water Monitoring

When the Permittee is applying Class A reuse water for purposes of groundwater recharge through surface percolation, the Permittee shall attempt to avoid ponding through widely dispersing its effluent over the application site and favoring areas of more porous soil. The sampling points for ground water will be monitoring wells MW-1E, M-1SW, MW-5S, MW-5W, and MW-5NE. Monitoring for the parameters listed below shall commence upon issuance of this permit in order to obtain baseline information. The Permittee shall submit the results of

additional and prior monitoring for the below parameters to improve the baseline for determining degradation.

The Permittee shall monitor the ground water at each of the five monitoring wells according to the following schedule:

In addition to the five groundwater sampling wells, static well water elevation only will be measured in monitoring well MW-HamS. River stage will also be recorded at River Station One (RS1) and River Station Two (RS2). These measurements shall be taken quarterly at the same time as the groundwater samples.

Parameter	Units	Minimum Sampling Frequency	Sample Type
Static well water elevation	Feet above reference datum[4]	Quarterly[1]	Measurement
Temperature	°C	Quarterly[1]	Measurement
Dissolved Oxygen	mg/L	Quarterly[1]	Grab
pH	Standard Units	Quarterly[1]	Measurement
Conductivity	umhos/cm	Quarterly[1]	Grab
Nitrate NO_3 (as N)	mg/L	Quarterly[1]	Grab
Nitrite NO_2 (as N)	mg/L	Quarterly[1]	Grab
TKN (as N)	mg/L	Quarterly[1]	Grab
Total Dissolved Solids	mg/L	Quarterly[1]	Grab
Total Coliform Bacteria	cfu/100 ml	Quarterly[1]	Grab
Chloride	mg/L	Quarterly[1]	Grab
Total Trihalomethanes	mg/L	Quarterly[1]	Grab
Cations/Anions: Calcium, Magnesium, Potassium, Sodium, Bicarbonate, Carbonate, Fluoride, sulfate	mg/L	Annually[2]	Grab
Total Metals:[3] Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Silver, Zinc	µg/L	Annually[2]	Grab

[1]Quarterly is defined as taken in the respective quarter of the calendar year and in time to be reported with the discharge monitoring reports (DMR's) submitted for the months of: March, June, September, and December.
[2]Annual samples shall be taken in the first quarter of each calendar year in time so that results shall be included with the March DMR which is due not later than April 15th.
[3]Analytical methods used shall be the following or alternatives at least as sensitive as the least sensitive method listed for the analyte: Arsenic, EPA 206.2 or 206.3; Cadmium, EPA 213.2; Chromium, EPA 218.2; Copper, EPA 220.2; Lead, EPA 239.2; Mercury, EPA 245.1, 245.2 or 1631; Nickel, EPA 249.2; Silver, EPA 272.2; Zinc, EPA 200.7, 289.2. Samples for silver may require alternative preservation methods (other than nitric acid) to avoid insoluble oxides which render the metal unavailable for analysis. Reference the text of the analytical method for details.
[4]A topographic map of the application site including monitoring well locations with elevations shown in the same reference datum shall be submitted within the first year of monitoring.

R3. RECLAIMED WATER REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall maintain records and report to the Departments of Ecology and Health in accordance with Special Condition S3, and the following conditions. All records shall be retained

for a minimum of three years. The falsification of information submitted to the Departments shall constitute a violation of the terms of this permit.

A. Reclaimed Water Operational Records

1. Operating records shall be maintained at the reclamation treatment plant or within a central depository within the Permittee's operating agency. These records shall include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, diversions to emergency storage or disposal; and all corrective or preventative actions taken.

2. For equipment necessary to provide reclaimed water of the designated quality, the recorded information shall include the time and cause of failure and corrective action taken.

3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report (DMR) form to the Departments of Ecology and Health at that address listed under R3.B below.

4. Cross Connection Control Report. An annual cross-connection control report shall be submitted to the Department of Health at the address listed under R3.B by a certified Cross-Control Specialist identifying all devices tested and any cross-connection incidents which occurred in the reuse system.

B. Submittal Reporting:

The first monitoring period to include data required under R.2 begins the first month the reuse application site receives treated effluent. Monitoring results shall be submitted monthly thereafter. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Departments of Health and Ecology, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit.

Monitoring Report forms must be submitted monthly whether or not the facility is reclaiming and distributing reclaimed water. If the reclamation facility was not operating during a given monitoring period, submit the form as required with the words "no reclamation or reuse" entered in place of the monitoring results.

Reclaimed water monitoring reports shall be submitted to the following addresses:

1. Department of Ecology, Permit Administrator, Southwest Regional Office at the address listed in Section S3.A.

2. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4th Avenue, Spokane, Washington 99204.

R4. RECLAIMED WATER DISTRIBUTION AND USE

The Permittee shall monitor the reclamation facility loading in accordance with Special Conditions S.2 and R.2 and the following conditions.

A. Authorized Uses and Locations

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute water reclaimed in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water that does not meet the treatment, water quality and monitoring requirements established in this permit or the use of reclaimed water other than for authorized uses and locations listed in a Department of Health and Ecology approved reclaimed water engineering report shall constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class C reclaimed water for irrigation at the Chehalis Poplar Tree Plantation and Class A reclaimed water for surface percolation at this same site.

B. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class C reclaimed water criteria at all times when agronomic application can be accomplished, and Class A reclaimed water criteria when, due to either recent rainfall, a high groundwater table, or because of crop dormancy, it would not be agronomic to apply the reclaimed water. Water not meeting these requirements must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology

C. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source

2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.

3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

D. Use Area Responsibilities

1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.

2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.

3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.

4. Where the reclaimed water production, distribution and use areas are under direct control of the Permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

E. Provisions applicable to Irrigation Use of Reclaimed Water:

1. There shall be no runoff of either Class A or Class C reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.

2. There shall be no application of Class C reclaimed water for irrigation purposes when the ground is saturated or frozen.

3. The reclaimed water shall not be applied to the irrigation lands in quantities that:

   a. Significantly reduce or destroy the long-term infiltration rate of the soil.

   b. Cause long-term anaerobic conditions in the soil.

   c. Cause objectionable odors or support insects or vectors.

   d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

F. Applicable Surface Percolation Use Conditions:

1. The Chehalis Poplar Tree Plantation is a dual use facility designed and approved for storage and percolation when discharge to the River is not allowed and application of reclaimed water for its nutrient value would not be agronomic. For any surface percolation of reclaimed water in areas of the plantation designed to serve as both storage and infiltration basins, the hydraulic loading rate shall be determined based on a detailed water balance. (It shall also include a nutrient loading analysis for nitrogen.) The calculated loading rate(s) and the parameters and methods used to determine the loading rates shall be submitted to the Department along with the analysis of the prior year's actual loading rates applied under such conditions. This information shall be submitted concurrently with the annual Inflow and Infiltration and Capacity reports required by Section S4 by **July 15, 2008**, and annually thereafter.

2. Background/natural groundwater quality must be documented and sampling locations identified and approved by the Department.

3. Surface waters shall not be impaired due to the infiltration of reclaimed water.

G. Water Reuse Plan

Prior to distributing reuse water to new uses and locations (other than listed in section R4.A) the Permittee shall prepare a water reuse plan. The plan shall be submitted to the Departments of Health and Ecology at least 60 days prior to the date when approval is requested. If an approval letter or no comments are received within this 60 day period the plan shall be considered approved. Once developed, the Permittee shall review the plan at least annually for accuracy and update the plan whenever new uses or users are proposed to be added to the distribution system. A copy of the revised plan shall be submitted to the Departments of Health and Ecology. The plan shall contain at least the following:

1. A summary description of the proposed water reuse system from the approved Engineering Report, and any modifications thereto;

2. A description of the reuse distribution system;

3. A listing of the uses, users, and locations of reuse sites.

4. An evaluation of each reuse site to include:

   a. The estimated volume of reclaimed water use,

   b. The means of application, and

   c. For irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

In accordance with the provisions of 173-230-140 (upon receiving the Declaration of Construction required under S4.A) the POTW shall be a Class IV POTW (as a tertiary POTW over 5.0 MGD capacity). Therefore, an operator certified for a Class IV plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class III plant shall be in charge during all regularly scheduled shifts. Until such time, the POTW is a Class III POTW and the operator classification requirements are one grade lower (Class III and Class II).

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for the entire sewage collection and treatment system. Maintenance records shall be maintained on all major electrical and mechanical components of the collection system, as well as the treatment works, distribution system, reclaimed water application site, and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

1. At all times, the reclamation facility, reclaimed water distribution system and use areas shall be maintained to ensure that all equipment is kept in a reliable operating condition.

2. A chlorine residual of at least 0.5 mg/l shall be maintained in the reclaimed water during conveyance from the reclamation plant to the use area unless waived by the Departments of Health and Ecology.

3. Maintenance of a chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of its obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions, except vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but shall be sufficient to maintain the biota.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least 10 days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the

exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

c. The Department is properly notified of the bypass as required in Condition S3E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit

The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with State Environmental Policy Act (SEPA); (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to

bypass will be by administrative order issued by the Department under Revised Code of Washington 90.48.120.

G Operations and Maintenance Manual

An Operations and Maintenance (O&M) Manual shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Department for approval before submitting the declaration of completion of construction of the new Sequencing Batch Reactor facility described in Plans and Specifications of February 2004. In addition to requirements of WAC 173-240-080 (1) through (5) the O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.

2. Wastewater system maintenance procedures that contribute to the generation of process wastewater

3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (e.g. defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)

4. The treatment plant process control monitoring schedule.

5. An alarm condition response plan to ensure that no untreated or inadequately treated wastewater will be delivered to the use areas.

6. A discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of cross connection control devices.

7. Operational strategies for the reclaimed water use areas.

The O&M Manual shall be kept current and reviewed by the Permittee to capture changes in equipment and procedures at least annually. The Permittee shall confirm the O&M manual has been reviewed and provide any minor updates to the Department for each calendar year. These updates or the certification that the O&M manual is current shall be provided not later than July 31 for the previous calendar year. Substantial changes or updates to the O&M Manual shall be submitted to the Department for review and approval prior to their incorporation into the manual.

The approved Operations and Maintenance Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual.

S6. PRETREATMENT

A. General Requirements

The Permittee shall work with the Department to ensure that all commercial and industrial users of the POTW are in compliance with the pretreatment regulations promulgated in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee shall not allow significant industrial users (SIUs) to discharge wastewater to the Permittee's sewerage system until such user has received a wastewater discharge permit from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee shall take continuous, routine measures to identify all existing, new, and proposed Significant Industrial Users (SIUs) and potential SIUs discharging or proposing to discharge to the Permittee's sewerage system (see Appendix B of Fact Sheet for definitions).

2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee shall notify such user by registered mail that, if classified as an SIU, they shall be required to apply to the Department and obtain a State Waste Discharge Permit. A copy of this notification letter shall also be sent to the Department within this same 30-day period.

3. The Permittee shall also notify all businesses which are potentially SIUs, as they are identified, that if their classification should change to an SIU, they shall be required to apply to the Department for a State Waste Discharge Permit within 30 days of such change.

D. Industrial User Survey

1. The Permittee shall complete and submit to the Department an Industrial User Survey listing all SIUs and those businesses which are potentially SIUs discharging to the POTW. The survey shall be received by the Department by **August 1, 2005**. At a minimum, the list of businesses to be surveyed shall be developed by means of a telephone book search, a water utility billing records search, and a physical reconnaissance of the service area. The Permittee shall collect and tabulate information through collection of signed IU Survey forms from all businesses which are sources of non-domestic wastewater. For businesses which are potentially SIUs, the information shall include at least: the business name, telephone number, address, description of the industrial process(es), and the known wastewater volumes and characteristics. For assistance with the development of the Industrial User Survey, the Permittee shall refer to the Department's guidance document entitled "Performing an Industrial User Survey."

2. The Permittee shall update their list of Industrial Users annually beginning **August 1, 2006**. The updated survey shall include a list of all new industrial users, as well as existing industrial users which are known or discovered to have significantly altered processes or disposal practices since submittal of the last survey or survey update. For industrial users for which there are potentially significant non-domestic discharges, the minimum information described in section D.1 above for Potential SIUs shall be obtained and included in the report.

E. Duty to Enforce Discharge Prohibitions

1. In accordance with 40 CFR 403.5(a), the Permittee shall not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violates general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.

2. The Permittee shall not authorize or knowingly allow the introduction of any of the following into their treatment works:

   a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.

   c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.

   d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

   e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.

   f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.

   g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40ºC (104ºF) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.

   h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).

3. All of the following are prohibited from discharge to the POTW unless approved in writing by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):

a. Noncontact cooling water in significant volumes.

b. Stormwater, and other direct inflow sources.

c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.

4. The Permittee shall notify the Department if any industrial user violates the prohibitions listed in this section.

F. Local Limit Development and Revision

As sufficient data becomes available, the Permittee shall, in consultation with the Department, reevaluate their local limits in order to prevent pass through or interference. Upon determination by the Department that any pollutant present causes pass through or interference, or exceeds established sludge standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent toxicity.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters. The Permittee shall not count residual solids which have already been removed from another Treatment Works discharging under an NPDES permit as headworks loading at this facility.

S8. CONSTRUCTION QUALITY ASSURANCE PLAN

Prior to initiation of construction, two copies of an approvable construction Quality Assurance Plan shall be prepared by the Permittee in accordance with WAC 173-240 and submitted to the Department for review and approval.

The report shall address any unresolved comments from the Department of Health's review of Plans and Specifications, in keeping with "Water Reclamation and Reuse Standards" (Washington State Department of Ecology and Department of Health, 1997) and good engineering practice.

S9. COMPLIANCE SCHEDULE

The City of Chehalis shall achieve full compliance with final National Pollutant Discharge Elimination System (NPDES) permit limits herein within eight years from the date of Consent Decree C96-5968 RJB except that, if rates have been raised to the hardship level as set forth in paragraph V.5.C(ii) of that document, and funding equivalent to that set forth in V.5.C.(iii) of that document has not been secured, then a two year extension shall be provided for Chehalis to achieve full compliance with final limits. Consent Decree C96-5968 RJB was dated and signed by the City on October 14, 1998, and by the Honorable Robert J. Bryan at District Court in Tacoma when the consent decree was ordered on January 14, 2000. For purposes of this permit the "date of the Consent Decree" shall be taken to mean the latter date (January 14, 2000). Therefore the Permittee shall have until January 14, 2008, to achieve final compliance with the final limits of this permit unless the aforementioned conditions for attaining a two year extension are met.

As required by the Consent Decree, the Permittee shall annually meet with the Department to report on its sewer rates and its efforts to seek funding. This meeting shall occur in July of each year. The Permittee shall provide a letter by August 1, of each year documenting whether the criteria which are required to be met in order to obtain a two-year extension, (as related in the above paragraph) have been met.

S10. SPILL CONTROL PLAN

The Permittee shall, by **September 1, 2007**, submit to the Department a Spill Control Plan for the prevention, containment, and control of spills or unplanned releases. The Permittee shall review the plan at least annually and update as needed. Changes to the plan shall be sent to the Department. The Plan and any supplements shall be followed throughout the term of the permit.

The initial or updated Spill Control Plan shall include the following:

- A description of operator training to implement the Plan.
- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and petroleum products, materials, which when spilled, or otherwise released into the environment, are designated Dangerous Waste (DW) or Extremely

Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or other materials which may become pollutants or cause pollution upon reaching state's waters.

- Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.

S11. EFFLUENT MIXING STUDY

A. General Requirements

Within 12 months after completing construction of any new outfall device, moving an outfall, or alteration of outfall diffusers, the Permittee shall determine the degree of effluent and receiving water mixing which occurs within the mixing zone (as defined in permit condition S1.B). The degree of mixing shall be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-"Critical Condition," or as close to critical conditions as reasonably possible.

The critical condition scenarios shall be established in accordance with *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996). The dilution ratio shall be measured in the field with dye using study protocols specified in the *Guidance,* section 5.0 "Conducting a Dye Study," as well as other protocols listed in subpart C Protocols. The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The *Guidance* mentioned above shall be consulted when choosing the appropriate model. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.

Validation (and possibly calibration) of a model may be necessary and shall be done in accordance with the *Guidance* mentioned above - in particular subsection 5.2 "Quantify Dilution." The resultant dilution ratios for acute and chronic boundaries shall be applied in accordance with directions found in the Department's *Permit Writer's Manual* (1994) - in particular Chapter VI.

A Plan of Study shall be submitted to the Department for review 30 days prior to initiation of the effluent mixing study.

B. Reporting Requirements

If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information shall be submitted to the Department as part of the Effluent Mixing Report.

The results of the effluent mixing study shall be included in the Effluent Mixing Report, which shall be submitted to the Department for approval no later than 12 months after completion of construction of any new outfall device or diffuser.

If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, the Department may issue a regulatory order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.

The Permittee shall use some method of fixing and reporting the location of the outfall and mixing zone boundaries [i.e., triangulation off the shore, microwave navigation system, or using Loran or Global Positioning System (GPS) coordinates]. The method of fixing station location and the actual station locations shall be identified in the report.

C. Protocols

The Permittee shall determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by the Department:

-Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges,* USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.

-Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges,* USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.

-Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges,* USEPA, Environmental Research Laboratory, Athens, GA, EPA/600-3-90/012, 1990.

-Department of Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia, WA 98504, July, 1994, including most current addenda.

-Department of Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia, WA 98504, October 1996.

-Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA 1985.

-Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12. *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA 1986.

S12. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year during periods when discharge to the river is occurring. If no discharge occurs during the calendar quarter, then no quarterly toxicity testing is required for that quarter. Calendar quarters are defined as January 1, through March 31; April 1, through June 30; July 1, through September 30; and October 1, through December 31. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50 percent of the organisms (LC_{50}). The percent survival in 100 percent effluent shall also be reported.

The first written report documenting the results of the quarterly sampling described above shall be submitted to the Department within 210 days after the Declaration of Construction. Subsequent reports shall follow on a quarterly basis until all four quarterly reports are submitted. The Permittee shall submit an analysis summarizing and interpreting the raw data from the quarterly reports within 90 days after the last sampling event.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F).

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100 percent effluent is below 80 percent, or

2. Any one test of any species exhibits less than 65 percent survival in 100 percent effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-

100. The zone of acute criteria exceedance is authorized in Section S1.D of this permit. The ACEC equals 24.4 percent effluent.

In the event of failure to pass the test described in subsection C of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

C. Monitoring for Compliance with an Effluent Limit for Acute Toxicity

If, in accordance with subsection B, an effluent limit for Acute toxicity applies, monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100 percent effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100 percent effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10 percent, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If testing required in section B shows the Permittee violated the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. If discharge to the river is not occurring, testing shall be conducted on the next four weeks on which discharge to the Chehalis River does occur using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not

anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the fourth additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first three additional compliance monitoring tests failed to meet the acute toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the acute toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent twice in the last "wet weather" season prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process. The testing shall be conducted early enough in the wet weather season to allow the Permittee to report the results of this monitoring by **March 1, 2009**.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20°C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12°C at receipt. All other samples must be below 8°C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4°C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the acute statistical power standard of 29 percent as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S13. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for chronic toxicity shall be conducted quarterly for one year during periods when discharge to the river is occurring. If no discharge to the Chehalis

River occurs during the calendar quarter, then no quarterly toxicity testing is required for that quarter. Calendar quarters are defined as January 1, through March 31; April 1, through June 30; July 1, through September 30; and October 1, through December 31.

The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC (2.35 percent effluent). The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

The first written report documenting the results of quarterly effluent characterization for chronic toxicity shall be submitted within 210 days after Declaration of Completion of Construction of the new wastewater treatment facility. Subsequent reports shall follow on a quarterly basis until all four quarterly reports are submitted. The Permittee shall submit an analysis summarizing and interpreting the raw data from the quarterly reports within 90 days after the last sampling event.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas*	EPA/600/4-91/002
Water flea[1]	*Ceriodaphnia dubia*[1]	EPA/600/4-91/002

[1]Alternatively, Daphnia Dulex or Daphnia Magna may be used if appropriate for chronic toxicity monitoring.

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.D pursuant to WAC 173-201A-100. The CCEC equals 2.35 percent effluent.

C. Monitoring for Compliance with an Effluent Limit for Chronic Toxicity

If there is a significant difference between the ACEC and the control in any of the chronic toxicity tests, monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20 percent, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance with an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Where discharge to the Chehalis River does not occur during a month, the next month when a discharge occurs shall resume the sampling. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify

the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent twice in the last "wet weather" season prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process. The testing shall be conducted early enough in the wet weather season to allow the Permittee to report the results of this monitoring by **March 1, 2009**.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20°C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12°C at receipt. All other samples must be below 8°C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4°C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39 percent as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S14. OUTFALL EVALUATION

A. General Requirements

The Permittee shall determine the degree of effluent and receiving water mixing which occurs within the mixing zone (as defined in permit condition S1.B). The degree of mixing shall be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-"Critical Condition," or as close to critical conditions as reasonably possible.

The critical condition scenarios shall be established in accordance with *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996). The dilution ratio shall be measured in the field with dye using study protocols specified in the *Guidance,* section 5.0 "Conducting a Dye Study," as well as other protocols listed in subpart C Protocols. The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The *Guidance* mentioned above shall be consulted when choosing the appropriate model. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.

Validation (and possibly calibration) of a model may be necessary and shall be done in accordance with the *Guidance* mentioned above - in particular subsection 5.2 "Quantify Dilution." The resultant dilution ratios for acute and chronic boundaries shall be applied in accordance with directions found in the Department's *Permit Writer's Manual* (1994) - in particular Chapter VI.

A Plan of Study shall be submitted to the Department for review 30 days prior to initiation of the effluent mixing study.

B. General Requirements

The Permittee shall inspect, within 12 months of construction of any new outfall diffuser device, the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, it shall be included in the report. By **March 1, 2009**, and biennially (every two years) thereafter, the inspection report shall be submitted to the Department. If a new diffuser has not been installed, this report shall document the condition of the existing diffuser.

C. Reporting Requirements

If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information shall be submitted to the Department as part of the Effluent Mixing Report.

The results of the effluent mixing study shall be included in the Effluent Mixing Report, which shall be submitted to the Department for approval no later than **March 1, 2009**.

If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, the Department may issue a regulatory order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.

The Permittee shall use some method of fixing and reporting the location of the outfall and mixing zone boundaries [i.e., triangulation off the shore, microwave navigation system, or using Loran or Global Positioning System (GPS) coordinates]. The method of fixing station location and the actual station locations shall be identified in the report.

D. Protocols

The Permittee shall determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by the Department:

-Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges,* USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.

-Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges,* USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.

-Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges,* USEPA, Environmental Research Laboratory, Athens, GA, EPA/600-3-90/012, 1990.

-Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia WA 98504, July, 1994, including most current addenda.

-Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia WA 98504, October 1996.

-Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA 1985.

-Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12. *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA 1986.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.

2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.

4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR Part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by the Department. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal by **January 1, 2009**.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.

2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.

3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to $10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to $10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement preceding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

G22. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.